



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RECEIVED

JAN 12 2004

TECH CENTER 1600/2900

Re Application of:

West et al.

Serial No. 09/653,406

Filed: September 1, 2000

For: Nitric Oxide-Producing Hydrogel
Materials

Art Unit: 1615

Examiner: Di Nola Baron, Liliana

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The citation of information on the attached Form PTO/SB/08 is made pursuant to 37 C.F.R. §§ 1.56, 1.97, and 1.98. A copy of each cited item is enclosed.

As this Information Disclosure Statement is being filed after the issuance of an office action on the merits, pursuant to 37 C.F.R. §1.97(c)(2), the fee of \$180, as set forth in §1.17(p), is enclosed.

The citation of this information does not constitute an admission of priority or that any cited item is available as a reference, or a waiver of any right the applicant may have under applicable statutes, Rules of Practice in patent cases, or otherwise.

01/09/2004 SDIRETAI 00000095 09653406

01 FC:1806

180.00 OP

Respectfully submitted,

Elena S. Polovnikova

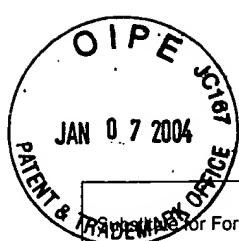
Elena S. Polovnikova, Ph.D.
Patent Agent
Reg. No.: 52,130

KILPATRICK STOCKTON LLP
Suite 2800, 1100 Peachtree Street
Atlanta, Georgia 30309
Our Docket: 47400-0100 (47400-252658)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on January 5, 2004.

Elena S. Polovnikova

Elena S. Polovnikova, Ph.D. – Reg. No: 52,130



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application Number	09/653,406
		Filing Date	09/01/2000
		First Named Inventor	Jennifer L. West
		Group Art Unit	1615
		Examiner Name	Di Nola Baron, Liliana
Sheet 1	of 4	Attorney Docket Number	47400-0100 (47400-252658)

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	1	4,526,938		Churchill et al.	07-02-1985	
	2	4,716,203		Casey et al.	12-29-1987	
	3	4,741,337		Smith et al.	05-03-1988	
	4	4,957,744		della Valle et al.	09-18-1990	
	5	4,987,744		Handley et al.	01-29-1991	
	6	5,410,016		Hubbell et al.	04-25-1995	
	7	5,508,317		Müller	04-16-1996	
	8	5,632,981		Saavedra et al.	05-27-1997	
	9	5,665,840		Pöhlmann et al.	09-09-1997	
	10	5,807,927		Stockinger et al.	09-15-1998	
	11	5,849,839		Hubbell et al.	12-15-1998	
	12	5,849,841		Mühlebach et al.	12-15-1998	
	13	5,900,433		Igo et al.	05-04-1999	
	14	5,910,316		Keefer et al.	06-08-1999	
	15	5,932,674		Müller	08-03-1999	
	16	5,939,489		Müller	08-17-1999	
	17	6,011,077		Müller	01-04-2000	
	18	6,299,604	B1	Ragheb et al.	10-09-2001	
	19	6,262,206		Nesvadba et al.	07-17-2001	

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁵
		Office ³	Number ⁴	Kind Code ³ (if known)				
	20	PCT	WO 96/32136		The United States of America..et al.	10-17-1996		
	21	PCT	WO96/15797		The United States of America represented by the Secretary, Dept. of Health and Human Services	05-30-1996		
	22	PCT	WO 01/15738		Rice University	03-08-2001		

Examiner Signature	Date Considered
-----------------------	--------------------

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document by the two letter code (WIPO Standard ST.3). ⁴For Japanese patent document, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

JAN 12 2004

TECH CENTER 1600/2900



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for Form 1449/A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Complete if Known

Application Number	09/653,406
Filing Date	09/01/2000
First Named Inventor	Jennifer L. West
Group Art Unit	1615
Examiner Name	Di Nola Baron, Liliana
Attorney Docket Number	47400-0100 (47400-252658)

Sheet 2 of 4

OTHER INFORMATION - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	23	BOHL et al., "Nitric oxide-generating polymers reduce platelet adhesion and smooth muscle cell proliferation", Biomaterials, 2000, 2273-2278, Vol. 21	
	24	BOHL et al., "Nitric Oxide-Releasing Materials for the Prevention of Thrombosis and Restenosis", Proceed. Int'l. Sym. Control. Rel. Bioact. Mater., 2000, 143-144, Vol. 27	
	25	BOHL et al., "Nitric Oxide Producing Materials: A Potential Therapy for Thrombosis and Restenosis", Proceed. Int'l. Sym. Control. Rel. Bioact. Mater., 1999, 56-57, Vol. 26	
	26	BOHL et al., "Nitric Oxide-Releasing Hydrogels for the Prevention of Thrombosis and Restenosis", Circulation, Oct. 31, 2000; II.734, Vol. 102, No. 18 (Abstract only)	
	27	COHN et al., "Biodegradable PEO/PLA block polymers", J. Biomed. Mater. Res., 1988, 993-1009, Vol. 22	
	28	COOKE et al., "Antiatherogenic Effects of L-Arginine in the Hypercholesterolemic Rabbit", J. Clin. Invest., 1992, 1168-1172, Vol. 90	
	29	DE GRAAF et al., "Nitric Oxide Functions as an Inhibitor of Platelet Adhesion Under Flow Conditions", Circulation, 1992, 2284-2290, Vol. 85	
	30	DE MEYER et al., "Effect of Nitric Oxide Donors on Neointima Formation and Vascular Reactivity in the Collared Carotid Artery of Rabbits", J. Cardiovasc. Res., 1995, 272-279, Vol. 26	
	31	DIODATI et al., "Complexes of Nitric Oxide with Nucleophiles as Agents for the Controlled Biological Release of Nitric Oxide: Hemodynamic Effect in the Rabbit", J. Cardiovasc. Pharm., 1993, 287-292, Vol. 22	
	32	DIODATI et al., "Complexes of Nitric Oxide with Nucleophiles as Agents for the Controlled Biological Release of Nitric Oxide: Antiplatelet Effect", Throm. Haem., 1993, 654-658, 1993	
	33	GARG et al., "Nitric Oxide-Generating Vasodilators and 8-Bromo Cyclic Guanosine Monophosphate Inhibit Mitogenesis and Proliferation of Cultured Rat Vascular Smooth Muscle Cells", J. Clin. Invest., 1989, 1774-1777, Vol. 83	
	34	GREENHALGH, "The Role of Growth Factors in Wound Healing", J. Trauma, 1996, 159-167, Vol. 41	
	35	HELLER et al., "Nitric Oxide Inhibits Proliferation of Human Endothelial Cells via a Mechanism Independent of cGMP", Atherosclerosis, 1999, 49-57, Vol. 144	
	36	HERN et al., "Incorporation of Adhesion Peptides into Nonadhesive Hydrogels Useful for Tissue Resurfacing", J. Biomed. Mater. Res., 1998, 266-276, Vol. 39	

Examiner
SignatureDate
Considered**RECEIVED**¹Unique citation designation number. ²Applicant is to place a check mark here if English language translation is attached.

JAN 12 2004

TECH CENTER 1600/2900



INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application Number	09/653,406
		Filing Date	09/01/2000
		First Named Inventor	Jennifer L. West
		Group Art Unit	1615
		Examiner Name	Di Nola Baron, Liliana
Sheet 3 of 4	Attorney Docket Number	47400-0100 (47400-252658)	

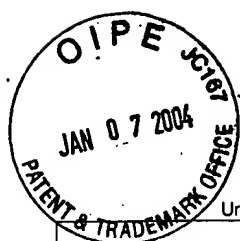
OTHER INFORMATION - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	37	HOLLAND et al., "Polymers for Biodegradable Medical Devices. 1. The Potential of Polyesters as Controlled Macromolecular Release Systems, 1986, 155-180, Vol. 4	
	38	IGNARRO et al., "Mechanism of Vascular Smooth Muscle Relaxation by Organic Nitrates, Nitrites, Nitroprusside and Nitric Oxide: Evidence for the Involvement of S-Nitrosothiols as Active Intermediates", J. Pharmacol. Exp. Ther., 1981, 739-749, Vol. 218	
	39	KWON et al., "Inhibition of Tumor Cell Ribonucleotide Reductase by Macrophage-derived Nitric Oxide", J. Exp. Med., 1991, 761-767, Vol. 174	
	40	LEFER et al., "Antineutrophil and Myocardial Protecting Actions of a Novel Nitric Oxide Donor After Acute Myocardial Ischemia and Reperfusion in Dogs", Circulation, 1993, 2337-2350, Vol. 88	
	41	LEGRAND et al., "Preclinical Promise of Becaplermin (rhPDGF-BB) in Wound Healing", Am. J. Surg., 1998, 48S-54S, Vol 176	
	42	LEPOIVRE et al., "Inactivation of Ribonucleotide Reductase by Nitric Oxide", Biochem. Biophys. Res. Comm., 1991, 442-448, Vol. 179	
	43	MANN et al., "Tethered-TGF- β Increases Extracellular Matrix Production of Vascular Smooth Muscle Cells", Biomaterials, 2001, 439-444, Vol. 22	
	44	MARAGOS et al., "Nitric Oxide/Nucleophile Complexes Inhibit the <i>in Vitro</i> Proliferation of A375 Melanoma Cells via Nitric Oxide Release", Cancer Res., 1993, 564-568, Vol. 53	
	45	MARTINEZ-DE JESUS et al., "Randomized Single-Blind Trial of Topical Ketanserin for Healing Acceleration of Diabetic Foot Ulcers", Arch. Med. Res., 1997, 95-99, Vol. Spring 28 (1) (Abstract only)	
	46	MATHEWS et al., "Biological Activity of S-Nitrosothiols: The Role of Nitric Oxide", J. Pharmacol. Exp. Therap., 1993, 1529-1537, Vol. 267	
	47	MORO et al., "cGMP Mediates the Vascular and Platelet Actions of Nitric Oxide: Confirmation Using an Inhibitor of the Soluble Guanylyl Cyclase", Proc. Natl. Acad. Sci. USA, 1996, 1480-1485, Vol. 93	
	48	RODOMSKI et al., "Comparative Pharmacology of Endothelium-Derived Relaxing Factor, Nitric Oxide and Prostacyclin in Platelets", Br. J. Pharmacol., 1987, 181-187, Vol. 92	
	49	SARKAR et al., "Nitric Oxide Inhibition of Endothelial Cell Mitogenesis and Proliferation", Surgery, 1995, 274-279, Vol. 118	

Examiner Signature		Date Considered	RECEIVED
--------------------	--	-----------------	-----------------

¹Unique citation designation number. ²Applicant is to place a check mark here if English language translation is attached.

JAN 12 2004

TECH CENTER 1600/2900



PTO/SB/08B (08-00)

Approved for use through 10/31/2002 OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for Form 1449/A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Complete if Known

Application Number	09/653,406
Filing Date	09/01/2000
First Named Inventor	Jennifer L. West
Group Art Unit	1615
Examiner Name	Di Nola Baron, Liliana
Attorney Docket Number	47400-0100 (47400-252658)

Sheet 4 of 4

OTHER INFORMATION - NON PATENT LITERATURE DOCUMENTS

50	SAWHNEY et al., "Rapidly Degraded Terpolymers of dl-Lactide, Glycolide, and ε-Caprolactone with Increased Hydrophilicity by Copolymerization with Polyethers", J. Biomed. Res., 1990, 1397-1411, Vol. 24
51	SCOTT-BURDEN et al., "Extracellular Matrix: Differential Influence on Growth and Biosynthesis Patterns of Vascular Smooth Muscle Cells from SHR and WKY Rats", J. Cell Physiol., 1989, 267-274, Vol. 141
52	SCOTT-BURDEN et al., "Genetically Engineered Smooth Muscle Cells as Linings to Improve the Biocompatibility of Cardiovascular Prostheses", Circulation, 1996, 11235-238, Vol. 94 (9 Suppl.)
53	SMITH et al., "Nitric Oxide-Releasing Polymers Containing the [N(O)NO] Group", J. Med. Chem., 1996, 1148-1156, Vol. 39
54	SPILIZEWSKI et al., "The Effect of Hydrocortisone Acetate Loaded Poly (DL-Lactide) Films on the Inflammatory Response", J. Control. Rel., 1985, 197-203, Vol. 2
55	STUEHR et al., "Nitric Oxide - A Macrophage Product Responsible for Cytostasis and Respiratory Inhibition in Tumor Target Cells", J. Exp. Med., 1989, 1543-1555, Vol. 169
56	WILLIAMS et al., "Safety and Tolerability of Intravenous-to-Oral Treatment and Single-Dose Intravenous or Oral Prophylaxis with Trovafloxacin", Am. J. Surg., 1998, 74S-79S, Vol. 176
57	WIEMAN et al., "Efficacy and Safety of a Topical Gel Formulation of Recombinant Human Platelet-Derived Growth Factor-BB (Becaplermin) in Patients with Chronic Neuropathic Diabetic Ulcers", Diabetes Care, 1998, 822-827, Vol. 21
58	ZICHE et al., "Nitric Oxide Promotes DNA Synthesis and Cyclic GMP Formation in Endothelial Cells from Postcapillary Venules", Biochem. Biophys. Res. Comm., 1993, 1198-1203, Vol. 192
59	Abstract, Derwent WPI, HU 9801673 A1 (08-28-2000), (Cycl-N) Cyclolab Ciklodextrin Kutato Fejlesztő,

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

¹Unique citation designation number. ²Applicant is to place a check mark here if English language translation is attached.**RECEIVED****JAN 12 2004****TECH CENTER 1600/2900**